

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-27 (cancel)

Claim 28 (new): A method comprising:

determining if a sub-block of image data comprising first color values, second color values, and third color values is an edge zone;

estimating an interpolated first color value using first color values from four direct neighbors in the sub-block by averaging three of the four direct neighbors whose first color values are similar to produce an edge zone average, if the sub-block is an edge zone;

multiplying the edge zone average by a value to produce a result; and

averaging the result with the remaining direct neighbor to obtain the interpolated first color value.

Claim 29 (new): The method of claim 28, further comprising:

deriving a second color hue using the interpolated first color value and the second color value associated with the interpolated first color value; and

estimating an interpolated second color hue using the second color hue.

Claim 30 (new): The method of claim 29, further comprising:

deriving a second color value from the interpolated second color hue.

Claim 31 (new): The method of claim 28, further comprising:

deriving a third color hue using the interpolated first color value and the third color value associated with the interpolated first color value;

estimating an interpolated third color hue using the third color hue; and

deriving a third color value from the interpolated third color hue.

Claim 32 (new): The method of claim 28, further comprising determining the value based on a relationship of intensity between the first color values of the three direct neighbors and the remaining direct neighbor.

Claim 33 (new): The method of claim 28, using the first color values from the four direct neighbors to estimate an interpolated first color value further comprising:

if the sub-block is a smooth zone, averaging the first color values from the four direct neighbors to produce the interpolated first color value.

Claim 34 (new): The method of claim 33, determining that the sub-block is a smooth zone further comprising:

identifying the first color values for the four direct neighbors; and

determining that the four first color values are substantially similar.

Claim 35 (new): The method of claim 28, determining if the sub-block is an edge zone further comprising:

identifying the first color values for the four direct neighbors; and

determining that three of the four first color values are substantially similar.

Claim 36 (new): A method comprising:

determining if a sub-block of image data comprising first color values, second color values, and third color values is a stripe zone;

estimating an interpolated first color value by averaging the first color values for a first direct neighbor and a second direct neighbor to produce a stripe zone average, where the first direct neighbor and the second direct neighbor form a stripe having substantially similar first color values, if the sub-block is a stripe zone;

multiplying the stripe zone average by a value to produce a first partial result;

producing a second partial result using a third direct neighbor and a fourth direct neighbor;

combining the first partial result and the second partial result to obtain the interpolated first color value.

Claim 37 (new): The method of claim 36, wherein combining the first partial result and the second partial result comprises:

adding the first partial result and the second partial result together to produce a stripe zone result; and

dividing the stripe zone result by four.

Claim 38 (new): The method of claim 36, determining if the sub-block is a stripe zone further comprising:

identifying the first color values for the four direct neighbors; and

determining that a first pair of the first color values are substantially similar.

Claim 39 (new): The method of claim 36, further comprising determining the value based on a relative strength of the stripe zone.

Claim 40 (new): An article comprising a medium storing a software program that if executed enables a processor-based system to:

determine if a sub-block of image data comprising first color values, second color values, and third color values is an edge zone;

estimate an interpolated first color value using first color values from four direct neighbors in the sub-block by averaging three of the four direct neighbors whose first color values are similar to produce an edge zone average, if the sub-block is an edge zone;

multiply the edge zone average by a value to produce a result; and

average the result with the remaining direct neighbor to obtain the interpolated first color value.

Claim 41 (new): The article of claim 40, further storing a software program to enable a processor-based system to:

derive a second color hue using the interpolated first color value and the second color value associated with the interpolated first color value; and

estimate an interpolated second color hue using the second color hue.

Claim 42 (new): The article of claim 41, further storing a software program to enable a processor-based system to:

derive a second color value from the interpolated second color hue.

Claim 43 (new): The article of claim 40, further storing a software program to enable a processor-based system to derive a third color hue using the interpolated first color value and the third color value associated with the interpolated first color value, estimate an interpolated third color hue using the third color hue, and derive a third color value from the interpolated third color hue.

Claim 44 (new): The article of claim 40, further storing a software program to enable a processor-based system to determine the value based on a relationship of intensity between the first color values of the three direct neighbors and the remaining direct neighbor.

Claim 45 (new): The article of claim 40, further storing a software program to enable a processor-based system to identify the first color values for the four direct neighbors, and determine that three of the four first color values are substantially similar.